

on a walk that offers patches of prickly pear on a wood road "that runs through an abandoned farm and then through primeval forest. After three quarters of a mile of this one comes to a lane to the left lined with cedars. Following this down to the edge of Franklin Lake—by leaving the birches and keeping straight ahead one comes to a brook trickling down a cascade." But all of the one hundred and more walks, varying from two to sixteen miles for one-day hikes with a few longer ones for week-end trips, are full of such suggestive notes. Following the descriptions is an appendix with a list of outing clubs (the Torrey Botanical Club and the Wild Flower Preservation Society are listed), of stopping places for overnight hikes, of equipment for the trail, of fire laws and regulations in New York, Pennsylvania, Connecticut, and Massachusetts, of geology and physical geography of the district and of the plant life. The book contains nine maps, modified from the U. S. Geological Survey, and eighty pen and ink sketches.

G. T. HASTINGS.

## PROCEEDINGS OF THE CLUB

MEETING OF OCTOBER 9, 1923

The meeting was held at the American Museum of Natural History.

Mr. E. P. Larkin, Flushing, N. Y., and Miss Zaida Nicholson, New York City, were elected to membership.

The Secretary announced, with regret, the death of two members, that of Mr. William S. Opdyke on Oct. 20, 1922, and that of Prof. W. W. Rowlee on August 8, 1923.

The program of the evening consisted of informal reports on summer work and excursions.

Dr. Denslow stated that he had spent ten weeks in Fairlee, Vermont, and that in nine previous summers he had found in that town a total of 33 species of orchids within a radius of about  $2\frac{1}{2}$  miles. This year one species, *Calopogon pulchellus*, was added to the previous number. On the 7th of July, about 500 plants of *Cypripedium hirsutum*, the showy lady's slipper, were found in one swampy locality. One of the flowers, showing a double lip, was sent to the herbarium of the N. Y. Botanical Garden. At Hewitt, New Jersey, later in the season, the fringed

gentian was seen to be abundant on the sides of a rocky railway cut.

Dr. W. A. Merrill, through notes read by the Secretary, referred to various expeditions for the collection of fungi, one to Florida in March, reported in full in the *Journal of The N. Y. Botanical Garden* for July and also in the *N. Y. Times*; one to Mountain Lake and Blacksburg, Virginia, on account of which is forthcoming in the *Journal*, and fungus notes which appeared in *Mycologia* for September; and a visit to Woodstock and Yama Farms in the Catskills, a report of which will appear in *Torreyia*. Dr. Merrill was also at the Interstate Park several times to assist Girl Scouts in their nature-study work.

Dr. Tracy E. Hazen reported that he spent his summer at Woods Hole, Mass., with a vacation later on Grand Manan, New Brunswick. Much of the time at Woods Hole was devoted to the identification of fresh water algae collected on Penikese Island as a part of an attempt to make a list of the plants on that island for comparison with a list published by Dr. David Starr Jordan fifty years earlier. An apparently new species of *Chlamydomonas* discovered on Penikese was found later on Grand Manan.

Mr. A. T. Beals reported on week-end trips to various points in the local flora area. All swamps were found to be unusually dry. In Bushkill, Pa., and Closter, N. J., *Ranunculus delphinifolius* was collected. Special attention was given to slime-moulds, several species of which were exhibited. Mr. Robert Hagelstein had reported to him the collection of eighteen species of slime-moulds from one log during the season. The different species appear to have different times for maturing, September being the culminating month for many of them.

Dr. M. A. Howe reported an abundance of the fringed gentian at Pleasantville, N. Y., in meadows where fresh seeds were sown several years previously by Dr. George F. Norton. He mentioned also the occurrence of *Gentiana linearis* Froel. at Newfane, Vermont.

Miss Pauline Kaufman mentioned visits to Arcadia, Sound Beach, Conn., and to Monachie, New Jersey.

MARSHALL A. HOWE,  
Secretary.

## MEETING OF OCTOBER 31, 1923

The meeting was held at the Museum of The New York Botanical Garden.

In the matter of an invitation to send a delegate to the Joseph Leidy Commemorative Meeting to be held in Philadelphia on December 6, it was agreed to leave the selection of a delegate to the Secretary.

Letters from various European institutions asking for donations of the Club's publications or proposing exchanges therefor were read and it was voted to refer the matter to a special committee to be appointed by the Chairman.

Mrs. Wheeler H. Peckham, New Rochelle, N. Y., was elected to membership.

The scientific program consisted of a discussion by Dr. N. L. Britton and Mr. William Beebe of "Plants of the Galapagos Islands," collected on the Williams Expedition of the N. Y. Zoological Society.

Dr. Britton, introducing the subject, alluded to the isolation of Galapagos Islands, lying in the Pacific Ocean near the Equator, about 650 miles west of Ecuador and 900 miles southwest of Panama. He referred to Charles Darwin's visit in 1835 as naturalist of the voyage of The Beagle, and to the impetus given to the evolutionary theory by Darwin's observation that tortoises from the different islands showed characteristic differences. There is considerable literature on the flora of these islands, the most comprehensive paper being Dr. Alban Stewart's "A Botanical Survey of the Galapagos Islands," published in 1911, and listing 615 species and varieties of spermatophytes and pteridophytes. Dr. Stewart spent more than a year in the archipelago in 1905-'06. Darwin thought that 50% of the plants and animals were endemic. Increasing knowledge has reduced the proportion of endemic species to about 40%. There have been two theories as to the origin of the fauna and flora of the Galapagos. One assumes the existence of an ancient bridge of land connecting the islands with the continent; the other assumes that the islands were always islands and that seeds and plants have been brought there by birds, winds and waves, etc. Some of the endemic species of plants show many races or varieties.

One of the most common grasses in the collection is *Eragrostis*

*cilianensis*, a weed. There are three or four species of sedges among the plants collected by the Williams Expedition. There are many amaranths, mostly endemic. A *Portulaca* or an allied plant has been revived from a supposedly dried specimen and is now thriving in the greenhouses of The N. Y. Botanical Garden. A heavily armed *Parkinsonia* is sometimes called the Jerusalem Thorn. There are numerous species of *Croton*, *Euphorbia*, and allied genera. *Croton Scouleri* has eight or nine varieties. An endemic species of *Waltheria* and two kinds of cotton, *Gossypium Klotzchianum* and *G. Darwinii* are found. There is an endemic *Lantana*, closely related to a South American species, and also a yellow-flowered *Cordia*, related to one of the mainland. Also an endemic species of *Coldenia*. Lichens are abundant on rocks.

Mr. Beebe emphasized the thorny character of the vegetation, this peculiarity interfering seriously with travel. He and his companion, Prof. W. M. Wheeler, had been able, however, to penetrate to a distance of five miles from the coast, while their predecessors, he believed, had gone only three miles. Small meadows with rich red soil covered with *Cenchrus* seemed to offer easy traveling but proved quite otherwise. There was frequent or nearly constant rainfall in the interior but it was very arid along the coast. The rock is porous tufa and lava, and the only stream is a small one on Chatham Island. The highest mountain has an elevation of about 5,000 feet and is clothed with a rather dense vegetation. *Elaphrium graveolens* appears to be the principal tree. Four-fifths of the flowers are yellow. In its general appearance the vegetation suggests that of the South African veldts. The members of the Williams Expedition gave more special attention to the animal life. Certain lizards were observed to eat cacti, spines and all. They also climbed trees and ate the leaves. The big tortoises are now nearly extinct. The birds, sea-lions, and animals in general showed no fear of man. Mr. Beebe found nothing to indicate original isolation of the Galapagos Islands group. The Humboldt Current and the prevailing winds are from the southeast. The nearest relatives of the animals, with the exception of sea-lions and penguins, are found in Central America and Mexico—to the northwest.

Mr. R. S. Williams made a brief report on the mosses of the

Galapagos Islands, stating that about one-third of the species are endemic, and that the others occur in Central America and northern South America.

MARSHALL A. HOWE,  
*Secretary.*

#### NEWS NOTES

The Wild Flower Preservation Society of America distributed during the holiday season leaflets on the preservation of the plants used as Christmas greens. The balsam tree is recommended for Christmas trees. The statement is made that *six hundred years* of Holly life is extinguished in one puny "3 x 2 x 2 ft. florist's box." The society also prepared stickers in red and green for envelopes with the message HOLLY AND LAUREL are fast disappearing, use substitutes.

Dr. J. Arthur Harris, who for a number of years has been a member of the staff of the Station for Experimental Evolution of the Carnegie Institution at Cold Spring Harbor, and a member of the editorial board of the Torrey Botanical Club, has been elected Professor of Botany and Head of the Department of Botany of the University of Minnesota. He expects to take up his new duties in September of the present year.

Dr. William Crocker, Director of the Boyce Thompson Institute of Plant Research of Yonkers, N. Y., has been elected President of the Botanical Society of America. Dr. A. F. Blakeslee of the Station for Experimental Evolution at Cold Spring Harbor, N. Y., is the new Vice-president of the Society.

Dr. and Mrs. N. L. Britton left New York on January 26th for a two months' visit to Porto Rico, where they will continue their investigations of the Flora of Porto Rico and the Virgin Islands.